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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,910	02/14/2002	Yoshinobu Tanako	219491US3	4561
22850	7590	11/29/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HEALY, BRIAN	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,910

Applicant(s)

TANAKO, YOSHINOBU

Examiner

Brian M. Healy

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the request for RCE filed 11/12/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7-9,11-13 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 2,6,10,14 and 21-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

Claims 2, 6, 10, 14 and 21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the references of record teaches the limitations of claim 1 with the additional limitations of having a groove that is configured to encompass a cylindrical space occupying at least 50% of an outer circumference of at least one of the plastic fibers. These limitations are recited in claims 2,6,10, and14. Also none of the references of record teaches or suggests a holder (used in the device and method of the independent claims) comprising a material having thermal expansion properties similar to thermal expansion properties of the plastic optical fibers, as is stated in claims 21-23 and the holder comprising ridges at four edges of an upper surfaces in which the groove is disposed with the cover being disposed on the upper surface of the holder with a perimeter defined by the ridges, as is stated in claim 24.

Claim 5 has been cancelled by Applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,4, 7-9,11-13, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et. al., U.S.P. No. 5,963,699 in view of Shevchuk, U.S.P. No. 6,325,549.

Tanaka et. al. 699' teaches (Figs.1-80 a method for coupling together a pair of plastic optical fibers and the apparatus for performing same comprising; a plurality of (at least two) abutted coated optical fibers 7, a fiber holder 51 including a plurality of grooves for holding optical fiber, a cover 52 which acts to hold down the abutted optical fiber and a removable clip 26 (Note the clip includes a protrusion 27 that cooperates with a void 29) which applies lateral pressure to the face of the holder/cover and acts to hold the abutted optical fibers wherein the fibers can be inserted and abutted together in the device with the help of a wedge device 24 that holds the holder and cover apart while the fibers can be inserted. Tanaka et. al. 699' also teaches the use of inclined portions 21 in order to easily facilitate the insertion of the fibers in the device.

Tanaka et. al. does not specifically teach the use of abutted plastic optical fibers in a fiber connecting device and method of connecting fibers using same.

Shevchuk, U.S.P. No. 6,325,549 teaches an optical fiber device and method of connecting optical fibers together using same including a pair of abutted plastic optical fibers 12,20 that are clamped together using a clamping means 15 in a holder 14.

Since both Tanaka et. al. and Shevchuk are from the same field of endeavor, i.e. optical fiber splicing and /or connecting devices, the use of clamped plastic optical fibers, used in the device and method of Shevchuk, would have been recognized in the pertinent art of Tanaka et. al.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to substitute the plastic optical fibers used in the device and method of Shevchuk for the optical fibers used by the device and method of Tanaka et. al., for the purpose of abutting and holding together a pair of plastic optical. Although not specifically stated by the reference, the use of fluororesins and other index matching epoxies between optical fiber ends is well known in the art.

The following references are also cited by the Examiner as being pertinent prior art: Arima, U.S.P. No, 6,350,065 (Figs.1-12), Patterson et. al., U.S.P. No. 5,638,477 (Figs.1-14) and Kobayashi et. al., U.S.P. No. 5,694,506 (Figs.1-28).

Response to Arguments

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571)272-2347. The examiner can normally be reached on Compressed schedule Tues-Thurs 7AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian M. Healy
Primary Examiner
Art Unit 2883


Brian Healy
Primary Examiner